A/V Surround Receiver

AVR-985SP

The AVR-985SP is Denon Professional's latest addition of versatile A/V Receivers, which incorporate all current surround formats and enhanced installation flexibility, all with great simplicity of setup and operation.















Multi Room
Must Einstein System

AL24 Processing Personal Memory Plus



Key Features

Denon Professional's Latest Surround Technology Faithfully Recreates the Surround Sound Produced at the Dubbing Stage. Finest DSP employed for faster processing better sound quality AVR-985SP features latest generation 32bit floating point DSP to decode all current surround formats, 96kHz signals to process room equalization. This DSP's processing power allows even the analogue input signals in all surround modes to be handled at 96kHz, which undoubtedly assures never-before-experienced high quality.

Various Decoding

DTS 96/24 Decoding for DVD-Video/ DTS-ES Discrete 6.1 and Matrix 6.1 DTS NEO:6/ Dolby Digital EX/ Dolby ProLogic IIx

Fully Discrete, Equal Power Seven Amplifier Channels, 100 Watts Each

100 W + 100 W (8 ohms, 20Hz - 20kHz, 0.05% THD) Front Center 100 W (8 ohms, 20Hz - 20kHz, 0.05% THD) Surround 100 W + 100 W (8 ohms, 20Hz - 20kHz, 0.05% THD) 100 W + 100 W (8 ohms, 20Hz - 20kHz, 0.05% THD) Surround Back

The AVR-985SP features an equal power 7-channel amplifier section, with identical amplifier design and high current discrete output devices on all 7 channels. Each of the 7 amplifier channels is rated at 100 watts, into 8 ohms, from 20 Hz - 20 kHz with no more than 0.05% THD.

Component Video Conversion

Up Conversion

This video conversion technology lets you enjoy the highest picture quality from all video sources connected to the AVR-985SP. Since composite and S-video signals are converted up to component video signals and output to the monitor, this allows you to connect all your video sources to a monitor using only one set of cables.

Down Conversion from S-Video to Composite

Three Sets of Component Video Inputs

The AVR-985SP is equipped with three sets of assignable, component video inputs and one set of monitor outputs with on screen display.

High Definition Quality Video Switching

The high-performance relay that is used to switch component video signals, features an extended bandwidth range up to 100 MHz.

RS-232C Control Port to support AMX, Crestron or 3rd party integrated control systems

+12 V Trigger Output x 2 (Assignable)

Auto Setup and Auto Room EQ Function with Microphone

The AVR-985SP is equipped with an Auto Setup and Room Equalization function, to achieve the most ideal sound field for your room. With the accompanying microphone placed at your listening position, the powerful new 32bit floating point DSP automatically and accurately analyzes, adjusts and sets the speaker configurations of your system. Also, the AVR-985SP analyzes and adjusts the frequency response of the speakers to the room with an 8 band parametric equalizer. The microphone (DM-S305) is a especially designed, high performance unit with a heavy duty base to suppress vibrations for accurate analyzing.

Room EQ Memory

The AVR-985SP provides for a maximum of 4 equalizing curves called "normal", "front", "flat" and "manual" to be stored into memory. Normal, front and flat are automatically memorized during the 'Auto Room EQ' Setup, allowing you easy selection of your favorite EQ curve without having to run 'Auto Setup' again.

Assignable Room EQ

The AVR-985SP permits assigning of an EQ curve for each surround mode as well as selecting the EQ to be 'On' or 'Off' for the Direct/Pure Direct

Support for Multi Zone Configurations **ZONE 2 Audio Capability**

The AVR-985SP provides a Multi Zone Output function and a Select function that let you output different sources to multiple zones. Sources can be selected for output to an additional zone, in addition to the main room. Multi-room Zone 2 can have variable pre-amp output along with composite video feed.

ZONE 2 Composite Video Output Capability

Powered ZONE 2

The AVR-985SP's Power Amplifier Assign function lets you assign the two Surround Back (SB L/R) amplifier channels when the system is not configured for 7.1, to instead drive the Multi-room Zone 2 speakers, with 100 Watts per channel output power, while still providing 5 discrete amplifier channels to drive all speakers in a 5.1 configured home theater room.

Remote In/Out Ports

Custom Rack Mount Kit Included

AVR-985SP

■ Features That Enhance Operating Ease Auto Surround

The AVR-985SP can automatically store the surround mode for any of three inputs signals: (1)Analog and PCM 2 channel, (2)Bit stream 2-channel (DolbyDigital, DTS) and (3)Bit stream multi-channel. If the type of input signal changes, the most appropriate surround mode is automatically selected for the signal.

New Front Panel Design with Larger Display

Larger display area capable of displaying a broad range of information including character icons for an intuitive recognition of input signal channels and output speaker channels.

Audio Delay Function

The Audio Delay Function corrects slight lags between sound and picture that can occur when a video signal is processed, such as in a Progressive Scan DVD player or outboard video processor.

Adjustable Cross-Over Switching

The AVR-985SP supports subwoofer cross-over switching with a choice of 8 cross-over frequencies: 40, 60, 80, 100, 120, 150, 200 and 250 Hz. This lets you more accurately match the performance characteristics of the subwoofer to the main speaker system.

A/B switching between front speakers

Pre-programmed remote controller with learning feature

■ Designed for high sound quality Pure Direct and AL24 Processing

Denon Professional's Pure Direct mode was designed for those who want the ultimate in sonic quality from their audio sources. Depending on input signal type, Pure Direct will turn off any unneeded circuitry of the AVR-985SP. When listening to PCM based sources, Denon Professional's waveform technology AL24 Processing brings out all the delicate nuances of the source material.

Hefty Power Transformer for Stable Supply of Power

A huge power transformer has been connected in the power section where it is combined with a rectifier diode and an oversized block capacitor to ensure a large, stable supply of electrical current. Accordingly, this design allows the AVR-985SP to achieve high output power of 100 W for each of the 7 channels.

Variable Gain Volume

S/N in the usable area has been improved. Finer adjustments are also possible in 0.5 dB steps across the extended range of -80 dB to +18 dB.

Block Capacitor

A large-capacity block capacitor was developed for the AVR-985SP to ensure a rock stable supply of power.

Detachable AC Power Cord

■ Frequency Synthesis Tuning 56-Station AM/FM Random Preset Memory Tuning

Auto Preset Memory

D&M Professional 1100 Maplewood Drive Itasca, Illinois 60143 Tel: 630.741.0330 Fax: 630.741.0652 www.d-mpro.com

Specifications

Power Amplifier Section

Rated output *THD figures are power amp stage values.

Front 100 W + 100W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

135 W + 135 W (6 ohms, 1 kHz, 0.7 % THD) Center 100 W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

135 W (6 ohms, 1 kHz, 0.7 % THD)

Surround 100 W + 100W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

135 W + 135 W (6 ohms, 1 kHz, 0.7 % THD)

Surround Back 100 W + 100W (8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

135 W + 135 W (6 ohms, 1 kHz, 0.7 % THD)

Preamplifier Section

Analog

Input sensitivity/imepdance 200mV/47kohms

Frequency response 10Hz-100kHz(+0,-3dB direct mode)

S/N 102dB(direct mode)

Rated output 1.2V

DigitalD/A output 2.0V

Phono

Input sensitivity/impedance 2.5mV

RIAA deviation +/-1dB(20Hz to 20kHz)

Rated output 150mV

Video Section

Frequency response

Composite video/S-video 5Hz-10MHz(+0,-3dB)
Component video DC-100MHz(+0,-3dB)

FM Section

Tuning frequency range 87.5 - 107.9 MHz Usable sensitivity 1.0 µV (11.2 dBf)

AM Section

Tuning frequency range 520 - 1710 kHz Usable sensitivity 18 μ V

General

Power supply AC120V, 60Hz

Power consumption 5.6A (1W max at standby mode)
Dimensions 434 (W) x 171 (H) x 429 (D) mm
17.1" (W) x 6.7" (H) x 16.9" (D)

Weight 13.5kg (29lbs 12oz)



(*1) Note on Movie mode:

On DENON A/V receivers, this Movie mode is displayed as "MODE CINEMA"

*Design and specifications are subject to change without notice.

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*"DTS", "DTS-ES ES" and "Neo:6" are trademarks of Digital Theater System, Inc.

Front panel with cap for front A/V input (Silver version is available)

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